## Total List of Well Completions Near Miller Domestic WW East Mamm Creek Field Sec 31 & 32-T6S-R91W, SE/4 Sec 35 & S/2 Sec. 36-T6S - R92W, W/2 Sec 5 & Sec. 6-T7S - R91W

Garfield County, Colorado
CBL & Neutron-Density Log Interpretation

3/29/2012														
		Surface	DCR	EPA				Top of	Top of	Top of				Poss.
		Casing	Interpretation	Interpretation	CBL Run	Surface		Williams	Rollins	Gas	Top of Wasatch	Top/Bottom		No. of
API Number	Lease and Well No.	Depth	CBL T/Cem.	CBL T/Cem.	Date	Pressure	Remarks	Fork		Zone	N-D X-over	Perfs	Conclusions	BP Comm.
		(ft.)	(ft.)	(ft.)		(psl)		(ft.)	(ft.)	(ft.)	(ft.)	(ft.)		Wells
Section 31	T6S-R91W													
1 05-045-19530	GGU Linkenhoker #23A-31-691	732	1930	1930	6/8/2011		Poor to fair bond fr/TOC to 2056'. Fair to good bond to 2580'. Excellent bond to TD.	3076	6742		2145, 2162, 2170, 2210		Definitely no communication to FW acquifers.	1
2 05-045-14314	GGU Miller #12A-31-691	719	2135	2184	11/30/2007	0	Poor bond fr/TOC to 2380". Fair to good bond to 2384". Fair bond to 2620'. Good bond to 2860'. Fair bond to	3354	6927	4133/4226	790, 1118, 1729, 1770'	4241, 6900	Possible behind pipe communication to FW Acquifers.	1
3 05-045-19520	GGU Miller #13A-31-691	728	2260	2283	6/9/2011	-	2960'. Generally, good to excellent bond to TD.	3156	6781	400F/4404	No N-D x-over above WF.	1005 0000	Definition of the second of th	_
4 05-045-14313	GGU Miller #13C-31-691	750	2580	2578	11/30/2007	0	Poor to fair bond fr/TOC to 2420'. Good bond to 2940'. Generally, excellent bond to TD.  Fair bond from TOC to 2828'. Generally, good to excellent bond to TD.	3336	6900		761, 784, 1714		Definitely no communication to FW acquifers.  Possible behind pipe communication to FW Acquifers.	2
5 05-045-14310	GGU Miller #13D-31-691	750	3500	1618	11/30/2007	0	Poor to fair bond fr/TOC to 2150'. Good bond to 2228'. Poor to fair bond to 2374'. Fair bond to 2560'. Fair to	3336	6903	4284	1080, 1108, 1285, 1323,		Possible behind pipe communication to FW Acquirers.	3
0 0001011010	000 1111101 17102 01 001	''	0000	10.0	1170012007	"	good bond to 4480'. Excellent bond to TD.	0000	0000	1201	1492, 1583, 1707, 1719.	1207,0002	ossisio sainia pipo saininanoatari ta i tri roquita e.	"
											1742, 1914, 2043			
6 05-045-17925	GGU Miller #14A-32-691	739	3128	3110	7/30/2009	0	Poor to fair cement bond from TOC to 5310'. Good to excellent bond to TD.	3143	6963	3963/4787	964, 1249, 1778	5183, 7056	Possible behind pipe communication to FW Acquifers.	4
7 05-045-17929	GGU Miller #14B-32-691	782	3154	3146	7/30/2009	0	Poor to fair cement bond from TOC to 3641'. Fair bond to 5750'. Good to excellent bond to TD.	3188	6985		966, 980, 1170, 1248,		Possible behind pipe communication to FW Acquifers.	5
											1782, 1944			
8 05-045-17930	GGU Miller #14C-32-691	765	3198	3186	7/30/2009	0	Fair bond from TOC to 3634'. Good to excellent bond to TD.	3221	7065	3268/5151	1183, 1253, 1485, 1635,	5296, 7127	Possible behind pipe communication to FW Acquifers.	6
											1806, 1956, 2190, 2239,			
9 05-045-17931	GGU Miller #14D-32-691	770	2917	2880	7/30/2009	0	Poor to fair bond fr/TOC to 3318'. Fair to good bond to 5982'. Excellent bond to TD.	3244	7119		1254, 1693, 1812		Possible behind pipe communication to FW Acquifers.	7
10 05-045-14311	GGU Miller #22A-31-691	768	2330	1804	11/30/2007	0	Fair bond from TOC to 2004'. Generally, good to excellent bond to TD.	3191	6834	4281/4274	1080, 1109, 1393, 1483',	4176, 6923	Possible behind pipe communication to FW Acquifers.	8
44 05 045 44240	CCI I MEH #22D 24 CO4	745	4200	Custons	44/20/2007	-	Conditional Edward To 24200 February 15200 February	2244	COCA	4050:4044	1527, 1950	4004 7047	Desirably an approximation to CIN/ Approximat	3
11 05-045-14312 12 05-045-14309	GGU Miller #22D-31-691 GGU Miller #23C-31-691	745 746	1300	Surface 2080	11/30/2007	0	Good bond fr/surf. To 2120'. Fair bond to 4530'. Fair to good bond to 5116'. Excellent bond to TD.  Poor to fair bond fr/TOC to 2059', Fair to good bond to 3236'. Good bond to 4610', Excellent bond to TD.	3341 3253	6964 6869		1527, 1620, 2214 936, 954, 1141, 1533,		Probably no communication to FW Acquifers.  Possible behind pipe communication to FW Acquifers.	9
12 05-045-14309	GGO Miller #23C-31-691	740	1600	2000	11/30/2007	"	Proof to fall bond in 100 to 2009, Pair to good bond to 3256. Good bond to 4610. Excellent bond to 10.	3233	0000	300114300	2272, 2293	5751, 6923	rossible berlind pipe communication to FVV Acquirers.	, ,
13 05-045-21095	GGU Miller #32A-31-691						Location only. Waiting to be drilled.				2212, 2200			
14 05-045-21094	GGU Miller #32B-31-691						Location only. Waiting to be drilled.							
15 05-045-21097	GGU Miller #32D-31-691						Location only. Waiting to be drilled.							
16 05-045-18234	GGU Miller #33A-31-691	786	No DCR	2604	11/13/2009	0	Fair bond from TOC to 3044'. Fair to good bond to 5222'. Generally, excellent bond to TD.					7072, 7170	FDCCNL log was not run & incomplete DCR.	1
17 05-045-18233	GGU Miller #33B-31-691	810	2340	2340	11/13/2009	0	Fair bond from TOC to 3060'. Good bond to 4720'. Generally good to excellent bond to TD.	3479	7213	3492/4748	869, 1315, 1362, 1634.		Possible behind pipe communication to FW Acquifers.	10
											1672, 2063		.,	
18 05-045-18239	GGU Miller #33C-31-691	850	2700	2677	11/13/2009	0	Fair bond from TOC to 3340'. Generally, good to excellent bond to TD.	3575	7343	3580/4937	853, 862, 874, 1142,	7348, 7433	Possible behind pipe communication to FW Acquifers.	11
											1323, 1643, 1658, 2120,			
											2680			
19 05-045-21096	GGU Miller #33D-31-691						Location only. Waiting to be drilled.							
20 05-045-18237	GGU Miller #34A-31-691	739	No DCR	2916	11/13/2009	0	Very poor to poor bond fr/TOC to 3700'. Poor to fair bond to 5150'. Fair to good bond to 5910'. Generally,			4365	865, 1306, 1622, 1685,		Possible behind pipe communication to FW Acquifers.	12
						_	good to excellent bond to TD.				1701, 1941, 2330			
21 05-045-18235	GGU Miller #34B-31-691	737	2150	2210	11/13/2009	0	Poor bond fr/TOC to 2520'. Fair bond to 3142'. Fair to good bond to 4970'. Excellent bond to TD.	3150	6840	3833/4479	867, 1310, 1395, 1561,		Possible behind pipe communication to FW Acquifers.	13
22 05-045-18236	GGU Miller #34C-31-691	740	2500	2575	11/13/2009	0	Poor bond fr/TOC to 2870'. Fair to good bond to 3550'. Generally, excellent bond to TD.	3199	6887	4525(4050	1620, 1700, 2089 870, 1310, 1385, 1622.	6000 7000	Possible behind pipe communication to FW Acquifers.	14
22 03-043-16236	GGO Millel #34C-31-691	740	2500	2010	11/13/2009	"	Poor borid 1/100 to 26/0. Pair to good borid to 3550. Generally, excessent borid to 10.	3155	0001	4000/4009	1663. 2121	6883, 7008	rossible berlind pipe continuincation to FW Acquirers.	1 **
23 05-045-18238	GGU Miller #34D-31-691	786	No DCR	2382	11/13/2009	0	Fair to good bond from TOC to 2780'. Generally, excellent bond to TD.			4529	872, 1307, 1316, 1392.	4951 7044	Possible behind pipe communication to FW Acquifers.	15
20 00 040 10200	000 Miller #048 01 031	1.00	110 0011	2002	1101012000	•	Take to good borta from 100 to 2100. Sorticially, extensive sorta to 10.			4020	1624, 1660, 2058,2519	4301,1044	ossisse serina pipe communication to 1 to require s.	"
24 05-045-17926	GGU Miller #43A-31-691	785	2730	2855	7/31/2009	0	Poor bond fr/TOC to 2990'. Fair to good bond to 3160'. Excellent bond to TD.	3220	7008	4585/4930	1182, 1262, 1662, 1915	4921, 7134	Possible behind pipe communication to FW Acquifers.	16
25 05-045-17928	GGU Miller #44A-31-691	742	3250	3272	7/30/2009	0	Fair to good bond from TOC to 3560'. Generally, good to excellent bond to 4936'. Fair bond to 5320'.	3030	6707		967, 991, 1159, 1176,		Possible behind pipe communication to FW Acquifers.	17
							Generally, good to excellent bond to TD.				1217, 1246, 1754, 2150			
26 05-045-17927	GGU Miller #44C-31-691	780	2795	3231	7/30/2009	0	Generally fair to good bonding fr/TOC to 6040'. Generally, good to excellent bond to TD.	3110	6786	3118/5006	964, 1170, 1218, 1248,	5010, 6974	Possible behind pipe communication to FW Acquifers.	18
											1766, 1912, 2025, 2050			
27 05-045-17932	GGU Miller #44D-31-691	785	2600	<2670	7/30/2009	0	Fair bond from TOC to 3214'. Fair to good bond to 5260'. Generally good to excellent bond to TD.	3136	6882	3142/5106	965, 1161, 1172, 1217,	5118, 6983	Possible behind pipe communication to FW Acquifers.	19
								-			1248, 1470, 1759			
28 05-045-13803	GGU Rodreick #21B-31-691 SWD	861	954	1018	4/12/2007	0	Poor bond fr/TOC to 1552'. Fair bond to 2302'. Fair to good bond to 2760'. Good to excellent bond to 6920'.	3230	6823	4154/4150	No N-D x-over above WF.	7435, 7725	Definitely no communication to FW acquifers.	4
							Fair bond to 7604'. Excellent bond to TD.							
29 05-045-15730	GGU Rodreick #31A-31-691	794	2500	2533	7/18/2008	0	Poor bond fr/TOC to 2936'. Fair bond to 3300'. Generally, fair to good bond to 4790'. Excellent bond to TD.	3206	6803	3465/4153	1004, 1103, 1341, 1600,	4145, 6887	Possible behind pipe communication to FW Acquifers.	20
30 05-045-15733	GGU Rodreick #31D-31-691	205	1000	2004	7/49/2009	0	Poor to fair bond fr/TOC to 3514'. Fair bond to 4520'. Generally, fair to good bond to 4900'.	2200	coso	4001(4040	2397	4000 7000	Describle helping sine source initiation to EIM Assertions	24
30 05-045-15733	GGU Rodreick #31D-31-691	805	1900	2604	7/18/2008	"	Generally, excellent bond to TD.	3389	6950	4261/4646	1106, 1793, 2463	4262, 7000	Possible behind pipe communication to FW Acquifers.	21
31 05-045-15735	GGU Rodreick #41A-31-691	796	2350	2339	7/19/2008	0	Fair bond from TOC to 2838'. Generally, good to excellent bond to TD.	3318	6945	3885/4534	1114, 1792, 2201, 2280	4759 7030	Possible behind pipe communication to FW Acquifers.	22
32 05-045-15736	GGU Rodreick #41C-31-691	800	2680	2690	7/19/2008	0	Generally, excellent bond fr/TOC to TD.	3258	6911		1115, 2147, 2192, 2465.		Possible behind pipe communication to FW Acquirers.	23
02 00 040 10/00	000 11041410 01 001	000	2000	2000	1715/2000	•	Soriolary, excellent soria in 100 to 10.	0200	0511	0000,4440	2924	4,02,03,2	ossisie serina pipe communication to 1 trateganors.	
33 05-045-15734	GGU Rodreick #42D-31-691	764	2250	2316	7/19/2008	0	Poor bond fr/TOC to 2450'. Fair bond to 2630'. Fair to good bond to 3602'. Generally, good to excellent bond	3332	6967	3407/4548	878, 893, 1109, 1132,	4768, 7052	Possible behind pipe communication to FW Acquifers.	24
							to TD'.				1877, 1975, 1987, 2368			
34 05-045-11323	GGU Scott #11D-31-691	744	1350	1696	1/28/2006	0	Fair bond from TOC to 4922'. Generally, good to excellent bond to TD.	3349	6899	3308/4245	2664, 3306, 3325	4633, 6854	Probably no communication to FW Acquifers.	5
35 05-045-11322	GGU Scott #12D-31-691	738	2350	2530	1/5/2006		Poor bond fr/TOC to 6418'. Generally, good to excellent bond to TD.	3141	6761		1427, 1921		Possible behind pipe communication to FW Acquifers.	25
36 05-045-07141	Gibson Gulch Unit #1-31	533	3595	3595	4/23/1997	1500	DV Tool @ 749'. Fair bond fr/685' to DV tool. Poor bond to surface. Main cmt job shows, generally, good to	3280	NDE	4430/4421	1127, 1190, 1534, 1980,	4273, 5034	Possible behind pipe communication to FW Acquifers.	26
		1					Excellent bond to TD.				2176, 2279			
37 05-045-07136	Gibson Gulch Unit #2-31	550	3200	3214	1/26/1997		DV Tool @ 738'. Poor to very poor bond above DV tool. Main cmt job shows excellent bond fr/TOC to TD.	3200	NDE	4156/4000			Possible behind pipe communication to FW Acquifers.	27
38 05-045-07163	Gibson Gulch Unit #3-31	528	3380	3367	7/9/1997		DV Tool @ 874'. Very poor bond above DV tool. Main cmt job shows excellent bond fr/TOC to TD.	3207	NDE	4256/4211	720, 1339		Possible behind pipe communication to FW Acquifers.	28
39 05-045-07252	Gibson Guich Unit #3-31B	622	300	408	11/7/2000		Fair bond fr/TOC to 1230'. Fair to good bond to 2554'. Generally, excellent bond to TD.	3193	NDE	/4184			FDCCNL log was not run.	2
40 05-045-07207	Gibson Gulch Unit #4-31	535	3220	3230	8/29/1997	1000	DV Tool @ 1637'. Poor to very poor bond above DV tool. Main cmt job shows excellent bond fr/TOC to TD.	3266	NDE	3915/4239	1423, 1433, 1598, 2004,	4146, 4973	Possible behind pipe communication to FW Acquifers.	29
1 1	I .	1	1	1	1	1		1	1	1	2183, 2238	1	I and the second	1